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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,025	10/04/2000	Toru Koizumi	35.C14850	5647

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EXAMINER

KAO, CHIH CHENG G

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 10/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/678,025

Applicant(s)

KOIZUMI, TORU

Examiner

Chih-Cheng Glen Kao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 09 July 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kochi et al. (US Patent 6,188,094 B1) in view of Goto et al. (US Patent 5237423).

Kochi et al. discloses a solid-state image pickup device (Fig. 7) with an optical system (Fig. 1) comprising at least one unit cell in a two-dimensional matrix having a photoelectric conversion portion (Fig. 7, #901), an amplifying means (Fig. 7, #903) to send a noise and optical signal (Fig. 7, #906), a transfer means with a first common line (Fig. 7, #911 and " $\phi\text{TX}(n+1)$ "), a reset means (Fig. 7, #902) with a switch to provide an ON-state voltage to the reset (Fig. 9, portion related to " T_2 "), a selecting means with a second common line (Fig. 7, #904 and " $\phi\text{SEL}(n+1)$ "), and a power line (Fig. 7, power to #902 and 904), wherein the photoelectric conversion portion, amplifying means, transfer means, reset means, and selecting means are all of the same conductivity type (col. 3, lines 39-42, and Figure 7).

However, Kochi et al. does not disclose wherein one common line performs between two unit cells operating in time series fashion nor a common power line.

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Goto et al. teaches wherein one common line performs between two unit cells operating in time series fashion (col. 3, lines 53-57).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the one common line of Goto et al., with the device of Kochi et al., since one would be motivated to get the image output from each photodiode using just one line to conserve wires, costs, and space as implied from Goto et al. (col. 3, lines 34-57, and Fig. 1).

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kochi et al. in view of Goto et al. as applied to claim 1 above, and further in view of Yonemoto (US patent 5894325).

Kochi et al. in view of Goto et al. suggests a device as recited above.

However, Kochi et al. does not disclose a power line between two unit cells.

Yonemoto teaches a power line between two unit cells (Fig. 1, #14).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the power line of Yonemoto with the suggested device of Kochi et al. in view of Goto et al., since one would be motivated to have the power line to power all cells from just one source as shown in Figure 1 of Yonemoto.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kochi et al. in view of Goto et al. as applied to claim 1 above, and further in view of Ohba et al. (US Patent 4349743).

Kochi et al. in view of Goto et al. suggests a device as recited above.

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However, Kochi et al. does not disclose a signal processing circuit.

Ohba et al. teaches a signal processing circuit (col. 6, lines 45-49).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the signal processing circuit of Ohba et al. with the suggested device of Kochi et al. in view of Goto et al., since one would be motivated to have the signal processing circuit to further process electrical signals, such as for correcting black or white level voltage as shown by Ohba et al. (col. 6, lines 40-49).

Response to Arguments

4. The objections to the drawings made in the Office Action mailed April 21, 2002, have been withdrawn in light of the amendment and proposals filed July 9, 2002.
5. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (703) 605-5298. The examiner can normally be reached on M - Th (8 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



gk
October 23, 2002



ROBERT H. KIM
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TECHNOLOGY CENTER 2882